



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/827,483

04/19/2004

Nien-Hua Pai

17657.49a

3314

22913

7590

10/30/2008

Workman Nydegger  
1000 Eagle Gate Tower  
60 East South Temple  
Salt Lake City, UT 84111

EXAMINER

WORKU, NEGUSSIE

ART UNIT

PAPER NUMBER

2625

MAIL DATE

DELIVERY MODE

10/30/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/827,483	<b>Applicant(s)</b> PAI, NIEN-HUA	
	<b>Examiner</b> NEGUSSIE WORKU	<b>Art Unit</b> 2625	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 28 July 2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 14-20 is/are allowed.
- 6) ☒ Claim(s) 1-5, 7-10, 12 and 13 is/are rejected.
- 7) ☒ Claim(s) 6-11 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 April 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>04/28/05</u> .  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Response to Arguments***

1. Applicant's arguments with respect to claim 1 have been considered but are moot in view of the new ground(s) of rejection. Applicant argues, Han '603' does not teach that "scanning platform for both reflective scanning and transmissive mode". Upon further review, the examiner has incorporated Lin et al (US 6,304,358) to further teach this limitation.

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-7 and 12-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Han '603' in view of Lin (USP 6304358).

With respect to claim 1, Han (603) shows or discloses a dual-mode scanning apparatus (transmissive and reflective scanner as shown in fig 1) capable of scanning both transmissive and reflective objects, (co1.4, lines 1-5) comprising: a scanning

Art Unit: 2625

platform for placing thereon an object to be scanned (reflective scanner platform 132 and transmissive scanning platform 138 of fig 1, co1.4, lines 1-10); a carriage module arranged under said scanning platform, (scanner chassis 144 moves along the rail for positioning 144 at any point, relative to the lens, co1.4, lines 25-35) and comprising an active light source (light source 96 and 98 of fig 6) for emitting light, the light being reflected by said object to enter said carriage module in a reflective scanning mode (optical switching mirror 32, shows in fig 3, switches between reflective mode and transmissive mode of scanning, co1.4, lines 50-55); and a light-guiding member (optical switching mirror via lens 122 and 24) arranged over said scanning platform for guiding the light emitted by said active light source to said object, co1.4, lines 45-55) the light penetrating through said object to enter said carriage module in a transmissive scanning mode (light from light source reflected or transmitted via mirror 32, enter to scanning module CCD 30, in a transmissive or reflective scanning mode, co1.4, lines 40-55).

Han '603' does not teach or disclose scanning platform for both reflective scanning and transmissive mode.

Line '358' in the same area of transmissive/reflective image scanning teaches scanning platform for both reflective scanning and transmissive mode (as shown in fig 3a and fig 3b, a scanning platform for both transmissive and reflective scan, wherein the carriage is arranged under the scanning platform (i.e., transparent plat) 45 of fig 3b, col.3, lines 35 through 60).

Therefore, It would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified imaging device of Han '603' by the teaching of Lin '358', further, it should be clear to one skilled in the art that anyone of a wide variety of image scanning device can be similarly employed to accomplish this desired result without depending from the teaching of the present invention, for the purpose of reducing the over whole weight of the apparatus and reduce cost.

With respect to claim 2, Han (603) shows or discloses a dual-mode scanning apparatus (transmissive and reflective scanner as shown in fig 1), wherein said scanning platform is transparent (system of fig 1, shows that having a transmissive and reflective scanning mode, as discussed in co1.4, lines 40-50)..

With respect to claim 3, Han (603) shows or discloses a dual-mode scanning apparatus (transmissive and reflective scanner as shown in fig 1), wherein said active light source is a linear lamp (light source 96 and 98 are linear light source as shown in fig 6).

With respect to claim 4, Han (603) shows or discloses a dual-mode scanning apparatus (transmissive and reflective scanner as shown in fig 1) wherein said active light source is a U-shaped lamp (it is a designee choose to have a U-shaped light source).

With respect to claim 5, Han (603) shows or discloses a dual-mode scanning apparatus (transmissive and reflective scanner as shown in fig 1) wherein said object is placed at a designated region on said scanning platform in said transmissive scanning

Art Unit: 2625

mode (scanning platform 132 and 132 are a designated area that the object to be scanned is placed, as shown in fig 1, co1.4, lines 10-15)..

With respect to claim 6, Han (603) shows or discloses a dual-mode scanning apparatus (transmissive and reflective scanner as shown in fig 1), wherein said carriage module further comprises a light mask covering a portion of said active light source corresponding to said designated region in said transmissive scanning mode in order to prevent said object from direct illumination of said active light source (optical mirror 32 of fig 3, switch up and down between reflective mode and transmissive scanning mode, so that the light is diverted from entering the scanning module during reflective scanning, and therefore, mirror 32 serves as a light masking covering of active light, co1.4, lines 45-55).

With respect to claim 7, Han (603) shows or discloses a dual-mode scanning apparatus (transmissive and reflective scanner as shown in fig 1), wherein said object is positioned with a holder that is attachable to and detachable from said designated region of said scanning platform (platform 138 of fig 1, positioned with a holder that is attachable to and detachable from said designated region of said scanning platform, see fig 1).

With respect to claim 12, Han (603) shows or discloses a dual-mode scanning apparatus (transmissive and reflective scanner as shown in fig 1), an image scanner (scanning system shown in fig 1, is an image scanner).

With respect to claim 13, Han (603) shows or discloses a dual-mode scanning apparatus (transmissive and reflective scanner as shown in fig 1) being a multifunction peripheral machine (scanner shown fig 1- through 6 is a multifunction device, in that having at least two function a transmissive or reflective scanning mode, co1.4, lines 40-65).

***Allowable Subject Matter***

6. The following is a statement of reasons for the indication of allowable subject matter: Claims 14-20 are allowed.

With respect to claims 14-18 are allowed, for the reasons the prior art for the reason the prior art searched and of record neither anticipates nor suggests a dual-mode scanning apparatus capable of scanning both transmissive and reflective objects, comprising: a scanning platform for placing thereon an object to be scanned; a carriage module arranged under said scanning platform, and comprising an active light source for emitting light, the light being reflected by said object to enter said carriage module in a reflective scanning mode; and a light-guiding member arranged over said scanning platform for guiding the light emitted by said active light source to said object, the light penetrating through said object to enter said carriage module in a transmissive scanning mode; wherein said active light source includes a first portion positioned under a light inlet of said light-guiding member and a second portion positioned under said object, and substantially only the light emitted from the first portion of said active light source penetrates through said scanning platform in said transmissive scanning mode.

With respect to claims 19-20 are allowed, for the reasons the prior art for the reason the prior art searched and of record neither anticipates nor suggests a dual-mode scanning apparatus capable of scanning both transmissive and reflective objects, comprising: a scanning platform for placing thereon an object to be scanned; a carriage module arranged under said scanning platform, and comprising an active light source for emitting light, the light being reflected by said object to enter said carriage module in a reflective scanning mode; a light inlet for receiving and then reflecting the light emitted by said active light source in a specified direction; and a light-guiding element arranged in said specified direction relative to said reflective element for receiving the light emitted by said active light source and reflected by said reflective element, and scattering the light to penetrate through said object to enter said carriage module in said transmissive mode, wherein said active light source includes at least three illuminating units, and a middle one of said three illuminating units is turned off in said transmissive scanning mode in order to prevent said object from direct illumination of said active light source.

***Claims objected to having Allowable Subject Matter***

7. Claims 8-10 and 11 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

With respect to claims 8-10, objected to having allowable subject matter for the reasons the prior art for the reason the prior art searched and of record neither



Art Unit: 2625

anticipates nor suggests the dual-mode scanning apparatus wherein said active light source comprises a plurality of segmental illuminating units, at least one of which is positioned corresponding to said designated region and turned off in said transmissive scanning mode in order to prevent said object from direct illumination of said active light source.

With respect to claim 11, Objected to having allowable subject matter for the reasons the prior art for the reason the prior art searched and of record neither anticipates nor suggests the dual-mode scanning apparatus wherein said light-guiding member comprises: at least one reflective element for reflecting the light emitted by said active light source in a specified direction; and a light-guiding plate arranged in said specified direction relative to said reflective element for receiving the light emitted by said active light source and reflected by said reflective element, and scattering the light to penetrate through said object in said transmissive scanning mode.

### ***Conclusion***

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to NEGUSSIE WORKU whose telephone number is (571)272-7472. The examiner can normally be reached on 9A-6PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Coles can be reached on 571-272-7402. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2625

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Negussie Worku/

Examiner, Art Unit 2625